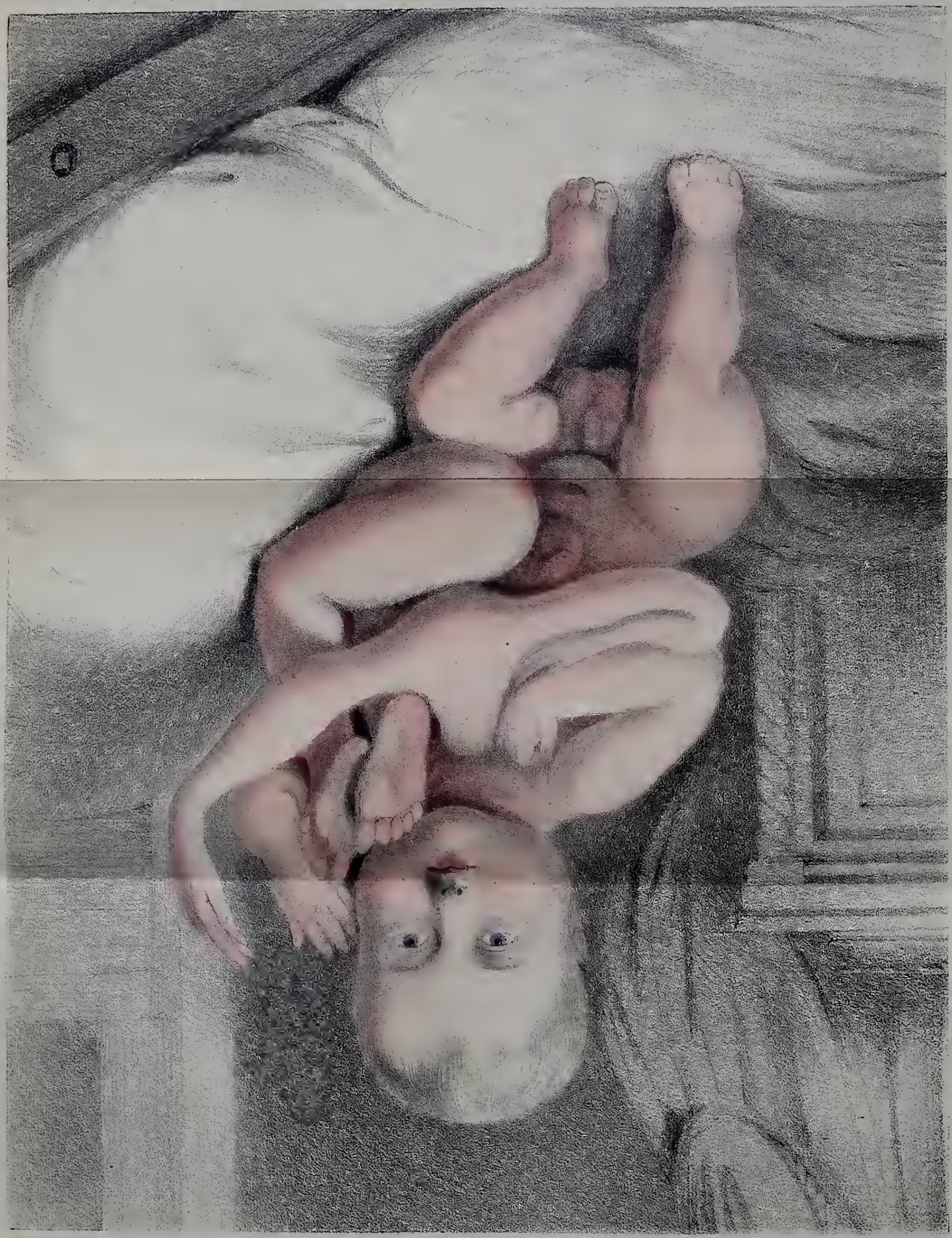

THE

RETROSPECTIVE ADDRESS,

DELIVERED AT THE

FIFTH ANNIVERSARY MEETING

OF THE

PROVINCIAL

MEDICAL AND SURGICAL

ASSOCIATION,

HELD AT CHELTENHAM, JULY 19TH AND 20TH, 1837.

BY JAMES L. BARDSLEY, M.D.

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THE RETROSPECTIVE ADDRESS.

When I behold before me many of those distinguished individuals whose learning and whose genius shed lustre upon the medical profession,—when I witness in this audience so numerous and enlightened an assemblage of provincial practitioners,—when I see so large a proportion of my professional brethren relying upon my own humble endeavours for that information which the Annual Retrospective Address, appointed to be delivered on occasions like the present, is expected to contain; it is impossible, even were I endowed with the

utmost amount of confidence and self-possession, that I should not experience an almost irresistible inclination to shrink from the task with which I have been entrusted. Encouraged, however, as I am, by the confident assurance that I shall obtain the indulgent consideration of the Association, I proceed at once to the discharge of this important duty.

It will of course be understood that I cannot, within the limits proper to be observed in the present address, enumerate all the improvements that have been effected in the various branches of medical science; and, therefore, I must endeavour to exercise some discrimination in the selection and arrangement of the more valuable contributions that have been made to the general stock of our knowledge within the period of the last year.

Amongst the several parts of which medicine consists, anatomy, as it holds the most important rank, first claims our attention; and, owing to the extent of cultivation which for many years has been bestowed upon this department, it will not be expected that any very numerous additions can have been made to it within a recent period. However, it appears from the research which I have been enabled to make, that some new and interesting anatomical facts have of late been supplied. Mr. Solly, who has recently distinguished himself by the assiduous attention which he has devoted to the brain and nervous system, has discovered the existence of certain fibres, which have hitherto escaped observation, ascending from the anterior columns of the spinal cord to the cerebellum, and forming thereby a bond of communication between these

two portions of the cerebro-spinal system.* It has been stated by Wutzer, that a branch of the thoracic duct enters the *vena azygos*—an observation, I believe, not previously published.† Some recent microscopical investigations into the intimate structure of the nerves and central parts of the nervous system have been made by Dr. Joseph Berres, Professor of Anatomy in the University of Vienna.‡ These researches, confirmatory in some respects of certain results obtained by Professor Ehrenberg, relative to the tubular form of the nervous fibre, shew, however, that this structure is not quite so simple and uniform as it was represented to be by that distinguished physiologist. The discovery of this peculiarity in the structure of the nervous fibre has also been confirmed in this country by the experiments of Mr. Andrew Prichard.§ The fact announced by Professor Arnold of the existence of a ganglion, which has been named the *otic*, on the third branch of the trigeminal nerve, has been corroborated by the dissections of Mr. Bennett, of Edinburgh. He represents its presence, however, as not being uniform.

In the department of physiology, I find that some interesting observations have been made by Professor Schultz, upon the comparative facility of the act of vomiting in the infant and adult. He has shown that its relative difficulty and infrequency in

* *Philosophical Transactions*, 1836.

† *Hannöversche Annalen, B. ii, H.* 1. 1836. Also *British and Foreign Medical Review*, October, 1836.

‡ *Medicinische Jahrbücher des k. k. Österreich. Staates: xviij. Bandes. 2d. Stück. Wien*, 1836.

§ *London Medical Gazette*, 1836.

the adult are dependant upon a difference in the conformation of the stomach, analogous to that which exists between the stomachs of the dog, cat, and other animals which vomit readily, and the stomachs of those which seldom or never perform this act, as the horse and the rabbit. The stomach of the infant, for example, receives the insertion of the œsophagus at its left extremity, and far removed from the pylorus; whilst, in the adult, the œsophageal termination is almost midway between the two extremities. This difference in structural configuration, in the opinion of Schultz, satisfactorily explains the phenomenon to which I have just referred.*

On the subject of digestion, its chemical changes, and the essential nature of that process, several very important facts have been discovered by Eberle, and confirmed, to a greater or less extent, by Müller and Dr. Schwann, of Berlin. From certain experiments performed, it is deduced that the chymifying fluid contains a peculiar principle, to which the term *pepsin* has been applied—this, though soluble in water, in diluted hydro-chloric and acetic acids, is destroyed by alcohol and infusion of galls, and it is further inferred that this principle is the solvent of all alimentary matters allied to animal albumen, but that it does not affect the solution of casein, animal jelly, starch, and gum, which is accomplished by the action of the free acids of the gastric juice.† The discovery, by Purkinje and Valentin,

* *Hufeland and Osann's Journal der practischen Heilkunde, Merz,* 1835.—Also *British and Foreign Medical Review,* October, 1836.

† *Müller's Archiv. für Anatomie und Physiologie, Jahrgang,* 1836.—*Hefts i and ii.*

of the existence of ciliary motions in reptiles, and also in certain warm-blooded animals, has been confirmed by Dr. Sharpey, of London, who has published some additional experiments, which suggest an explanation of the manner in which nature effects the transit of the ovulum to the uterus.* The views of Professor Alison, regarding a self-moving power in the blood acquired during its re-integration in the lungs, have recently received further support from the researches of Dr. Hawley, of Edinburgh.†

Amongst the investigations into the physiology of the nervous system, it is proper to notice certain experiments and observations that have been made with a view to determine the independent character of the nerves of taste. So far as I am aware, one of our associates, Mr. Noble, of Manchester, has the merit of having first published, in a number of the *London Medical Gazette,* for 1834, a case of facial paralysis manifesting loss of feeling on the left half of the tongue, with a perfect maintenance of the sense of taste; from this coincidence, he inferred that taste is as independent of ordinary tactile sensibility, as are the senses of sight, hearing, and smell, and must, like them, possess a separate nervous apparatus. No specific functions having been assigned to the chorda tympani and the palatine branches of Meckel's ganglion, Mr. Noble suggested that, as these were distributed to the surfaces where the sense of taste resides, future observations might determine that they were specially associated with this sense. This inquiry has since engaged the

* *British and Foreign Quarterly Medical Review,* April, 1837.

† *Edinburgh Medical and Surgical Journal,* October, 1836.

attention of Panizza, Mayo, and Dr. Alcock, of Dublin; but as the results of their experiments, performed by mutilation of living animals, have presented no uniformity, the question may still be regarded as unsettled. I think, however, it will generally be considered as a fact now established, by pathological observation, that separate filaments endow the tongue with tactile and gustatory sensibility; but the source of the filaments, on which the sense of taste depends, yet remains an interesting matter of investigation. Another point in the physiology of the nervous system which has recently excited some interest is the very ingenious explanation, first offered by Mr. Hunt, another of our associates, relative to the complex distribution of the orbitar nerves to the muscles of the eyeball; this subject having frequently occupied the attention of physiologists without any very satisfactory result. Mr. Hunt was led to consider that the *obliquus superior*, rolling the eye outwards and downwards, and the *rectus externus*, moving that organ directly outwards, do not receive their nervous supply from the same source as the other muscles, because as the branches of the third pair supply the *rectus superior, inferior*, and *internus*,—muscles which act in concert in both eyes, another source of nervous distribution must exist for the *obliquus superior* and *rectus externus*, inasmuch as by their action one eye is turned either directly or obliquely outwards, whilst the other is moved in an inward direction. These views, in detail, are ably explained by their author in the last volume of our *Transactions*.* In a

* Volume 5th.

paper, however, published in the *London Medical Gazette* for September last, a somewhat different explanation of the functions of the muscles of the eyeball and their nerves has been offered by Mr. Walker, of Manchester. This gentleman, in adopting the opinion of Meckel, Cloquet, Knox, and some others, that the *obliquus superior* turns the eye inwards, and not outwards, contends that the function of this muscle associates its action with that of the *rectus externus* of the opposite globe. In other respects, Mr. Walker's views essentially coincide with those of Mr. Hunt.

The subject of phrenology, regarded by its advocates as the physiology of the brain, has recently engaged the attention of the Academy of Medicine in Paris. The question had been proposed—how far phrenology is entitled to rank among the sciences? The discussion, it appears, occupied four sittings, when, after deliberate consideration of the arguments adduced on all sides, the Academy deferred any decision until the evidence upon which the system rests should be rendered more complete.

Medical pathology and therapeutics have, for some years, been investigated with more than ordinary zeal and assiduity; and, in reviewing the recent labours bestowed upon these branches, we observe that several interesting subjects have received further elucidation. Fever, complicated with disordered condition of the intestinal mucous membrane, continues to engross much of the attention of foreign physicians, and has given rise to a considerable number of essays and reports. Amongst the principal of these, I would particularly mention some

remarks by Dr. Frenzel, who has published in *Hufeland's Journal** an able description of the disease as it occurred in the Military Hospital of Dresden; and an interesting delineation of it by Dr. Killiches, as observed at the town of Brux, in Bohemia ;† as also an excellent account of the morbid anatomy of this affection, from the Fredericstadt Infirmary, by Dr. Stannius, of Berlin,‡ and an elaborate paper, upon this form of fever, by the regimental surgeon Grossheim, as it appeared in the summer of 1835, in the Imperial Grenadier Guards.§ These, and other valuable contributions which have recently been published, afford an ample confirmation of the results obtained by the French pathologists, relative to the frequent association of abdominal ulceration with the typhoid condition in fever. Before leaving the present subject, I must not omit to speak of the discovery, by Professor Schonlein, of Zurich, of minute microscopical crystals in the fæcal matter of patients labouring under typhus fever. These were transparent and fragile, and consisted chiefly of sulphate of lime, phosphate of lime, and soda. They were generally rhombic, or prismatic, and were not detected in the discharges accompanying the ordinary forms of diarrhœa, even that occurring in the latter stage of tubercular phthisis.‖ Müller, of Berlin, to whom the account of Professor Schon-

* *lxxx. Band,* 1835. 1 *St.*

† *Medicinische Iahrbücher, des k. k. Österr. Staates; xviij. vol. Wien,* 1835.

‡ *Hufeland and Osann's Journal der Practischen Heilkunde,* 1835. *February, March, and April.*

§ *Ibid. lxxij. Band* 1836. *iv. St. April.*

‖ *Müller's Archiv,* 1836. *Hefts iii. and iv.*

lein was addressed, found crystals, however, in the excrementitious matter of subjects brought for dissection; and, in these instances, it was ascertained that death had not ensued from typhoid fever.

A peculiar disease affecting young children, usually designated *laryngismus stridulus*, or the crowing inspiration of infants, and sometimes *spasmodic croup*, has lately received a considerable degree of attention, more especially from Dr. George Hirsch, of Konigsberg,* and Dr. Rösch, of Sweningen, in Wirtemberg.† It will generally be known that the affection, upon which the late Dr. Hugh Ley published a useful and valuable treatise, had some years previously engaged the notice of Dr. Kopp, who, in 1830, read a paper upon this subject at Heidelberg, wherein he referred the origin of this ailment to an enlargement of the thymus gland. This doctrine of the origin of spasmodic croup has been confirmed and illustrated by Dr. Hirsch, who has adduced various cases and dissections to shew that the disease occurs in early infancy when the thymus gland is fully developed, in these examples retaining its large size beyond the ordinary period, with morbid alteration of structure. Against this theory, Dr. Rösch reasons very strongly, and maintains that it is an affection altogether spasmodic and nervous, and not necessarily dependent upon any organic change, or undue magnitude, of the thymus gland, coinciding in these respects with the views of Dr. Hugh Ley and other English physicians. The employment of the sulphate of copper in this form of

* *Hufeland and Osann's Journal, Jul.*. 1835.

† *Ibid. lxxxii.* 1. *St. Januar. Seit.* 96, 1836.

infantile disease, as also in ordinary croup, has been proposed by several German practititioners; and the results have been well set forth in two excellent papers by Dr. Zimmerman, of Hamburgh,* and by Dr. Bürger, of Bamberg.†

In the treatment of another and a very intractable disease occurring in infants, the diarrhœa and vomiting which terminate in softening of the mucous membrane of the alimentary canal, Dr. E. F. Dürr, of Wirtemberg, has proposed the employment of pure alumina, in combination with mucilaginous remedies, and he affirms that the success of this mode of treatment has been most complete.‡

In the medical section at the Bristol meeting of the British Association for the Advancement of Science, Dr. Prichard read a paper of great practical value, in which he described a peculiar mode of exciting counter-irritation in certain forms of cerebral disease. This consists in making an incision through the scalp, down to the pericranium, in the direction of the sagittal suture from the summit of the forehead to the occiput, and the incision thus made is kept open by the introduction of one or two, and in some instances of three rows of peas. In illustration of this practice, Dr. Prichard detailed several cases of confirmed amaurosis which had been unsuccessfully combatted by the antiphlogistic and mercurial treatment, but from which a perfect recovery took place upon the establishment of suppuration by an issue of this description. I am happy

* *Hufeland's Journal*, 1835. *B.* 2 *Aug. ii. St.*

† *Ibid*, 1836. *Band lxxxii. April iv. St. Seite* 86-89.

‡ *Ibid*, 1835. *lxxxi. i. St. Jul. Seite* 98.

in being able to offer my own testimony in corroboration of the practical utility of Dr. Prichard's suggestion, having myself, in two instances of severe cerebral affection, indicated by mental imbecility, stupor, and imperfect vision, adopted the plan, after the failure of the ordinary modes of treatment, and with decided advantage.

A case of idiopathic tetanus, successfully treated by mercurial friction carried to the extent of producing salivation, has been recorded by M. Forget.* The extract of belladonna has been very extensively employed in the treatment of hooping cough, at the Hôpital des Enfans Malades.† M. Piorry has recommended, and himself adopted, a novel mode of treating circumscribed tuberculous excavations, more remarkable for its plausibility than for the soundness of the principle upon which it rests. He professes to have effected compression upon the ribs, in these cases, so as to have produced an obliteration of the cavities by adhesion of their sides.

The vegetable alkali, salicine, has formed the subject of a valuable monograph published at Potsdam, by Dr. A. P. Blom, which has since been translated into the German language. He ascribes to this substance, in the treatment of intermittent and remittent fevers, a virtue superior in many instances to that of quinia, or piperin, and records cases in which, these being contra-indicated, salicine proved a most efficacious substitute. In the

* *Bulletin General de Therapeutique Medicale et Chirurgicale, Oct.* 1836.

† *Gazette Medicale de Paris, Feb.* 1836.—The usual dose is from one-eighth to half a grain, repeated once or twice in the day.

bark of the roots of the apple, pear, cherry, and prune, M. de Koninck has detected a new principle named by him *phloridzin*. He says that it possesses properties analogous to those of quinia, and has been beneficially administered in ague when this latter has failed. It has also been recommended in leucorrhœa and gonorrhœa.*

In asphyxia, arising from inhalation of the vapour of oil, Dr. Krimer, of Aix-la-Chapelle, has successfully used the carburet of sulphur. The sulphuret of lime has been strongly recommended by Dr. Savardin, in cases of impetigo, porrigo, and various other cutaneous affections; and he tells us that he has verified its curative powers in five hundred instances.†

Professional attention, after a lapse of some years, has been again solicited to the supposed therapeutical agency of mineral magnetism. Doctors Bulmeringg,‡ Wolf, and Becker,§ have been for some time past in the habit of employing it in various nervous affections, and the results which they have published would seem to afford evidence of its favourable operation under some circumstances. Creosote, amongst the more modern substances introduced into the materia medica, continues to excite the interest of the profession. It is stated

* *Annales de la Societè des sciences medicales et naturelles de Bruxelles.*— The dose is from ten to fifteen grains, given one hour before the accession of the paroxysm.

† *Journal des Connaissances Medico-chirurgicales*, 1836, *January*. *Tom. ii.*

‡ *Beiträge zur aerztlichen Behandlung mittelst des Mineralischen Magnetismus. Von Dr. M. E. Bulmeringg.*

§ *Hufeland und Osann's Journal. May*, 1835.

to have been tried by Dr. Köhler, of Warsaw, with favourable results in herpetic eruptions; and by others, in obstinate functional derangement of the stomach, as recommended by Dr. Elliotson. It has even been pronounced by Dr. Rampold, Physician to the Hospital at Esslingen, to have cured pulmonary consumption. *Credat Judæus Apella!*

The presence of iodine in the cod-liver oil, a remedy which once enjoyed very high repute, especially in Lancashire, has lately been established by the chemical investigations of Hopfer de l'Orme, as had previously been suspected by Dr. Kopp, of Hanau. Hence, it is not improbable that the virtues of this oil, in a particular species of chronic rheumatism, may have some dependence upon the existence of iodine in its composition.

Scabies has been cured by the external application of green soap, as first advised by Dr. Cramer.* This remedy has since been very extensively used by Dr. Pfeufer, of Bamberg,† who reports that, in six hundred cases, its efficacy was amply confirmed. M. M. Dumeril and Roux have, in a report presented to the Academy of Sciences, spoken in terms of high commendation of M. Legrande's new method of treating serofula, with the salts of gold.

Several pathologieal facts, possessing both novelty and interest, have recently been recorded. Amongst others, a case has been published by Delle Chiaje,

* *Kleine Beiträge zur Medizinischen Erfahrung; Mitgetheilt von Dr. Cramer, Nr. xlii. Wochenschrift für die Gesammte Heilkunde,* 1837.

† *Beobachtungen über die Krätze und ihre Behandlung durch die Schmier-oder-grüne Salbe von Dr. Ch. Pfeufer zu Bamberg. Daselbst,* 1833.

as witnessed by the late Professor Folinea, of Naples, in which certain Entozoa, called *Polystoma sanguicola,* were discovered in the blood discharged by a patient attacked with hæmoptysis. The explanation of this phenomenon, offered by Delle Chiaje, is, that they originate in the parenchymatous structure of the lungs, and, perforating the parietes of the pulmonary vessels, are afterwards ejected. Thielmann, of St. Petersburgh, has related a necroscopical observation, in which was found a supernumerary kidney, situated on the right side of the fifth lumbar vertebra.* A diagnostic symptom, indicative of extensive peritoneal adhesions, has been announced by Dr. Bright. This consists in a peculiar impression, somewhat analogous to crepitation, communicated to the touch, in the exploration of the abdomen in these cases.† Dr. Albers, of Bonn, has described a remarkable affection of the thoracic duct, wherein its parietes were dilated after the manner of the arterial structure in aneurism.‡ Some interesting results have lately been obtained in the chemical investigation of the fluids, in certain morbid conditions of the system. In patients labouring under diabetes, sugar has been detected in the blood by Signor Ambrosioni,§ and more recently by Mr. Maitland.‖ The urine, in this

* *Journal der Chirurgie, und Augen-Heilkunde; Encyclographie Des Sciences Medicales. Decembre,* 1836.

† *London Medico-Chirurgical Transactions.* Vol. xix., p. 176.

‡ *Hannöversche Annalen, B. ii., H.* 1., 1836. Also, *British and Foreign Medical Review.* October, 1836. No. 10.

§ *Omodei, Annali Universali di Medicina. April,* 1835.

‖ See also *Medical Gazette.* No. for March, 1836.

same disease, has been found, in the analysis of M. Lehmann, to contain hippuric acid *

Amongst other new discoveries that have been made known to the profession, within a very recent period, the method of preserving dead bodies practised by Dr. Tranchini, of Palermo, holds an important rank.† The plan consists, in passing through the carotid artery an injection composed of two pounds of arsenic, and twenty or twenty-four pounds of water or spirit of wine coloured with cinnabar; whereby the vascular system becomes thoroughly saturated with this solution. In cases where putrefaction has advanced in some degree, the same fluid is introduced by means of a trocar into the cavity of the abdomen. I have the testimony derived from personal observation of our intelligent associate Dr. Knight, of Sheffield, in proof of the complete efficacy of this process.

I must not here omit to make mention of one of the most extraordinary announcements, in connection with this subject, that have ever attracted the attention of our profession. I refer to the discovery by Signor Segato, of the artificial conversion of animals, or fractions of animals, into a state of stony induration and indestructibility, whilst at the same time they retain their natural form, and colour, and by a modification of the process, their very flexibility. This most marvellous statement has been made by Signor Pelligrini, in a pamphlet published at Padua, which contains full particulars of the wonderful efficacy of Segato's process, and affords

* *Journal für praktische chemie. Vol.* 6, *Cah.* 3, *p.* 113.

† *British and Foreign Medical Review.* October, 1836.

also the testimony of four Florentine professors in attestation of the verity of the discovery.*

In the strict domain of surgery, I have scarcely met with a new fact which has escaped the industry and research of my learned and able predecessor, Mr. Crosse, who, in his powerful address of last year, traced, with no common zeal and assiduity, almost all the improvements in this branch of our art up to the latest period. However, I may allude to one or two contributions, of modern date, which indicate a continued advancement in this division of the profession. M. Ricord has afforded a report of the great success attending the employment of mercurial ointment, in the treatment of erysipelas, and the utility of this practice has also been established by the experience of M. M. Lisfranc and Broussais † Numerous examples have been adduced by M. Renaud in proof of the value of raw cotton in the same affection. In his hands, it appears to have subdued the pain, heat, and other marks of inflammation, in a very surprising manner. He simply applies soft well-carded cotton in sufficient quantity to protect the erysipelatous parts from exposure to light and air.‡ The nitrate of silver, both in substance and in strong solution, has been employed by M. Ricord, in the blenorrhagia of females,—a mode of treatment that has also been adopted by some practitioners in this country. Mr. Liston, of

* *Della artificiale riduzione a Solidità Lapidea e Inalterabilita Degli Animali, Scoperta Da Girolamo Segato Relazione Dell' Avocato Giuseppe Pelligrini. Firenze,* 1835.

† *Gazette des Hopitaux,* 1836.

‡ *Journal des Connaissances Medico-Chirurgicales. February,* 1836.

London, has successfully performed a new operation for nævus, by passing a needle, armed with a double ligature through the base of the tumour, and another, in like manner, at right angles with the former; and, the needles being withdrawn, he compresses the tumor by tying the ligatures.*

The department of obstetrics has presented but few additions to our knowledge, and but few facts of striking interest, within the actual period of the present retrospect. In the branch of operative midwifery, however, I observe it related in *Hufeland's* excellent *Journal*,† that Valentin Newber, of Molsdoff, has on two occasions, during the past year, performed the Cesarean section. In the one instance, the life of the mother was saved, though that of the child was lost; and in the other, the reverse occurred, for the life of the child was preserved, whilst that of the mother was unexpectedly sacrificed. In the former case, the woman was thirty-seven years of age, and the straight diameter of the pelvic outlet was only about an inch and a half. The child's movements had not been experienced for three weeks prior to the operation, and before its performance the female had been in labour during thirty-six hours. In the second case, the section was made upon a woman aged thirty-two years, and about a week after the operation she was seized with an attack of peritonitis, which terminated fatally. A somewhat novel and curious case has been announced by Sommer, in one of the Prussian Journals wherein a living child was extracted by

* *Lancet*. Dec. 21, 1836.

† November 1836.

turning a quarter of an hour after the death of the mother, and twenty-four hours after the rupture of the membranes.* The question of superfœtation is one which continues to divide the opinions of physiologists. A fact, however, has been recorded by Mœbus, strengthening the evidence in favour of the possibility of this occurrence. A female, aged thirty-five years, was delivered of a full grown child thirty-three days after the previous expulsion of a mature fœtus and placenta.

Whilst engaged in the review of matters connected with midwifery, I will take the opportunity of narrating a somewhat remarkable phenomenon that has recently occurred in my own immediate neighbourhood. The wife of a labouring man, residing in Stalybridge, near Manchester, gave birth, in the latter end of May of the present year, to a monstrosity, apparently the result of an abortive effort of nature to effect the formation of twins. This *lusus naturæ,* having only one head, is possessed of four arms and four legs; the sex is masculine, and the organs of generation are double; with several other analogous peculiarities, which, however, will be better understood from a drawing than from any mere verbal description I have accordingly provided myself with one for the inspection of the members of the Association. It will be interesting to know that this singular being is still living, and in the seeming enjoyment of excellent health.†

Amongst the many useful designs embraced by

* *Kleinert's Repertorium.*

† See drawing at the beginning of the work.

this Association, it is a wise regulation that investigations into the nature of epidemic diseases should constitute one of its principal objects; and our Central Council have most judiciously instituted certain inquiries relative to the main features of that formidable epidemic, the influenza, which prevailed so extensively, in various parts of Europe, about the close of the last year and the commencement of the present. It is hoped that, by this proceeding, such an accumulation of facts may be obtained, as will tend to throw additional light upon the etiology and pathology of this affection. In this country, the influenza first made its appearance in the northern parts of Scotland in the month of November, and was rife in Edinburgh about the middle of December; it gradually increased until the second week in January, when it prevailed almost like a pestilence during the whole of that month. About the same time it invaded the metropolis and most of the large towns throughout England. The particular characters of this malady were strongly and distinctly marked. In most instances, it was ushered in with an overwhelming sense of languor and debility, accompanied with head-ache, pain in the limbs, and the other indications of general febrile disturbance. With this constitutional condition were associated, in all instances, catarrhal symptoms, varying in intensity, according to the other peculiarities of the individual case. In ordinary attacks, the affection subsided under the combined influence of rest, mild aperients, diaphoretics, and diluents, in the course of a few days. But in many persons, advanced in life, or previously enfeebled by bron-

chitis, or other chronic disease, the debility became so extreme as to render the patient unable to cough or to expectorate; a low, insidious inflammation was established in the vesicular and parenchymatous structures of the lungs; rapid and laborious respiration ensued, and the patient ultimately expired with all the marks of general exhaustion. In other instances, where the disease was neglected or improperly treated, or where a premature exposure to cold occurred, violent and active pulmonary inflammation was induced, and it proved equally unmanageable and fatal. It is remarkable that, in some cases, the affection seemed to pervade, to a considerable extent, the mucous membrane of the alimentary canal, as manifested by profuse watery, or sero-sanguineous diarrhœa, with violent tormina and tenesmus. In this form of the attack, all remedies were ineffectual, until warmth and moisture became freely developed upon the skin, and until the alvine evacuations began to assume a feculent character. For the promotion of these objects, rest, bland and diluent drinks, with occasional doses of Dover's powder and the hydrargyrum cum cretâ, were most generally effectual. Owing to the enfeebling influence of this epidemic, it frequently became requisite, more especially with the aged and the infirm, to administer, at short intervals, wine or brandy, in moderate quantities; and, by this proceeding, recovery, even in such subjects, was sometimes effected. Yet, in other cases, the disease became exceedingly tedious and complicated, requiring a very cautious method of treatment, which combined the employment of tonics,

diaphoretics, and expectorants. In some habits, the cough and general debility were protracted for many weeks, and the remedial means, found to be of the greatest utility, were constant attention to diet, the due regulation of the bowels, the use of anodynes to allay the cough, and the judicious exhibition of tonic medicines. The morbid appearances chiefly observed upon dissection, were consolidation of the substance of the lungs, with engorgement of the bronchial tubes, by a frothy, or muco-purulent secretion; and, generally, there existed, also, an emphysematous condition of the pulmonary vesicles.

In the course of the last year, that destructive and pestilential affection, the malignant cholera, committed its fatal ravages in Vienna. In the early part of the month of June, 1836, the popular sickness assumed the form of gastro-duodenic fever, with bilious diarrhœa, and it was attended with unusual diminution of muscular energy. About the same time, cases of cholera were observed, not, indeed, numerous, but of so intense a character as to destroy life in a few hours. These progressively increased in frequency, with the gradual disappearance of the bilious epidemic, until the 25th of the same month, when it began to rage with all the severity which has so generally marked its disastrous career. The last days of June proved a mournful period to the citizens of Vienna, for about this time there were upwards of seven hundred persons afflicted with cholera, and of this number more than one half fell victims to its awful virulence.

It is truly a subject of humble acknowledgement

to the Author of all good, that we, in this country, have of late been almost entirely spared from the return of this dreadful visitation; yet I feel assured that, should it please Providence to afflict the people of this kingdom with a recurrence, the members of our profession will again be found ready to endanger their health and safety in the disinterested and benevolent discharge of those perilous duties which, on former occasions, so eminently entitled them to the gratitude and admiration of their countrymen.

It deserves to be regarded as an indication of the advancing movements of medical science, that the value and importance of medico-statistical researches are gradually attracting the attention of the profession, in a degree more proportionate to their merits. Until within a very few years, scientific men diligently, but too exclusively, pursued the beaten track of investigation adopted by their predecessors, and neglected the advantages offered to them in the department of medical statistics. To the labours of M. M. Berard, Villermé, Quetelet, Benoiston de Chateau-Neuf, Guerry, Louis, Lombard, Casper, Parent-Duchatelet, Hawkins, Rickman, Forbes, Thackrah, and one or two others, the profession is not less indebted for the results derived from their particular investigations, than for their practical illustration of the utility of statistical inquiries.

In this country the materials for preparing statistical tables are, in a great measure, yet to be collected; for it is a circumstance deeply to be regretted, that the records of most of our public

medical charities contain few or no particulars respecting the cases brought under treatment, from which accurate medico-statistical calculations can be formed. The time has, however, arrived for the introduction of a more exact method of research, calculated to facilitate medical investigation, and more adapted to the enlightened spirit of philosophical enquiry which characterizes the present age.

Of the beneficial results which may ultimately accrue to medical science from the more general adoption of statistical investigations, when prosecuted with care and a due attention to accuracy of notation, and minuteness of detail, it would be difficult, in the present infancy of this branch of inquiry, to form any proper estimate. Some time must necessarily elapse, before these advantages can be obtained; and the conclusions afforded by statistical investigations will require to be received with caution until such an amount of facts has been accumulated as will justify general deductions; for it must be borne in mind, that these inquiries, when applied to the development or confirmation of philosophical principles, are valuable according to the accuracy with which they are conducted, and to the nature and extent of information they supply, on the several subjects to which they are directed.

Statistical science essentially embraces the numerical arrangement of facts, holding no connexion with speculation or hypothesis; hence, every statement, resting merely on conjecture and supposition, ought to be most carefully excluded from statistical tables.

The recent publication of Parent-Duchatelet on

the *Statistics of Prostitution in the City of Paris,* offers an admirable illustration of the satisfactory nature of the data obtained from this method of research. Indeed, the work embodies such an immense accumulation of interesting and important facts, considered either in their physiological, hygienic, or moral relations, as to demand from me somewhat more than a casual notice. The author, with great industry and perseverance, seems to have made the collection of information on this subject his chief occupation for a period of eight years. In his preface, Duchatelet explains the motives which induced him to commence the undertaking, and the results that may be expected to flow from the investigation; and these have an especial reference to the repression of immorality, to the public sanity, and to improvements in the administrative department exercising jurisdiction over the prostitutes of Paris. The author, unlike most of his predecessors who have written upon such subjects, takes nothing for granted, makes no general assertions, nor speaks from mere vague impressions; but he pursues, throughout, a *systematic* inquiry, commencing with the probable number of these unfortunate individuals, the places of their nativity, the kind of families to which they belong, and their previous occupations and early education. In the course of the work, he also enters upon very many interesting physiological considerations regarding this class of persons, and upon the influence exerted by their peculiar mode of life upon their state of health. All the results of Duchatelet's inquiries are based upon the authority of state and police documents, or upon the evidence

of actual observers; and they are rendered still more precise and available from the use, in many instances, of numerical tables. There is one statement made by Duchatelet which, if confirmed, may possess considerable importance in a medico-legal point of view. It relates to the discovery of a new sign of pregnancy by M. Jacquemin, which consists in a violet, or wine-lee colouration of the whole of the mucous membrane of the vagina during this particular period. This sign is so evident, that Jacquemin has never been deceived by it, and he considers that it is alone sufficient, independently of other symptoms, to prove the existence of pregnancy. This state of the membrane was observed in an examination of not less than four thousand five hundred pregnant females. Altogether, this work, as contributing very essentially to the stock of useful information, capable of being directed to a variety of beneficial purposes, may, I think, be well classed among the most important that have appeared before the profession within the last year.

The medical literature, both of our own and other countries, has been also enriched by many other excellent contributions. Amongst works of high professional interest, there are several which merit particular notice. Bouilland's *Essai sur la Philosophie Medicale* may be especially named. This publication professes to explain and to illustrate the true principles upon which medical science ought to rest, and by the application of which every real advancement must be effected, and medicine be brought to partake more of the character of the exact sciences. It is to be regretted that the author

exhibits himself, but too exclusively, a partizan of the school of Broussais; and thus, in some measure, detracts from the high character which his essay, in other respects, is calculated to maintain. The systematic work of Müller, upon the Principles of Physiology, claims a short notice upon the present occasion. Although the first edition of this work was published in 1833, yet as it has attained a second one, which only reached this country in the beginning of 1836, I think it right to refer to its appearance, as it may probably be considered the most complete and philosophical treatise upon this subject extant.* During the last year, a new volume on the Physiology of Man, by Tiedemann, has been published at Darmstadt. It includes the examination of the function of nutrition, in all its relations; and herein, the author has furnished the physician with one of the clearest and most comprehensive works upon the MATERIA ALIMENTARIA that have yet been submitted to the attention of the profession. A valuable characteristic of this publication is that, at the commencement of each section, chapter, and subdivision, a list is subjoined of the principal treatises, relating to each of the subjects discussed, and thus is afforded the key to their literary history.† There is at present emanating from the medical press, at Leipsic, an excellent Dictionary, by George Frederick Most, which embraces every

* *Handbuch der Physiologie des Menschen für Vorlesungen. Von Dr. Johannes Müller, Zweite verbesserte Auflage. Coblentz*, 1835.

† *Physiologie des Menschen. Von Friedrich Tiedemann, Dritter Band, Nahrungs-Bedürfniss, Nahrungs-Trieb und Nahrungs-Mittel des Menschen. Darmstadt*, 1836.

division of medical science. The first volume only has, as yet, appeared. The articles are generally written by authors whose names have been previously associated with their respective subjects, and they indicate the probability of its constituting, when complete, one of the most learned and useful works of the kind in existence.* The department of surgical pathology has recently received an extremely interesting contribution, in the anatomico-pathological treatise on the general anatomy and inflammatory diseases of bone, by Frederick Miescher, a pupil of the celebrated Müller. Mr. Solly, to whose anatomical investigations I have before had ocasion to refer, has furnished the student, within the last twelve months, with an excellent work on the anatomy of the human brain, remarkable for the concise and lucid illustrations which he has educed from a comparative view of the nervous system in the lower orders of animals. In this volume, Mr. Solly has also supplied a great desideratum, in having afforded, in a clear and elementary style, an exposition of the improved anatomy of the brain, as first taught and demonstrated by Gall and Spurzheim. Upon the practice of physic, three new publications have appeared within the past year, that are well calculated, from the high reputation of their authors, to attract general attention. Doctors Bright and Addison have issued the first part of a work upon the sub-

* *Encyclopädie der Gesammten Medizinischen und Chirurgischen Praxis, mit Einschluss der Geburtshülfe, der Augenheilkunde und der operativen Chirurgie. Von Georg Freidrich Most. Erster Band, A. Humectantia-Leipzig,* 1836.

ject, comprising the consideration of fever, under all the points of view of which it is susceptible. The treatise is short, but from its perspicuity seems well adapted for initiating the student in the principles of medical practice. Another of the works, to which I have just alluded, is by Dr. Williams, which presents a somewhat peculiar character, inasmuch as the author adopts, as a leading principle, both in his pathological and therapeutical doctrines, the notion that all febrile affections depend upon the presence of some poisonous element. This work certainly affords some interesting descriptions of disease, but its utility, as a guide to the student, is diminished by the circumstance of his being introduced, at once, into the more obscure and abstruse departments of theoretical toxicology. Dr. Craigie has offered to the medical reader, within the last few months, the first volume of his work upon the Practice of Medicine, which, indeed, promises to be more comprehensive in its design and execution than either of the former publications. Dr. Stokes's new volume on the Diagnosis of Diseases of the Chest, must not be omitted in an enumeration of the new publications possessing great practical value. Our pathological literature has lately been enriched by the excellent work of Dr. Hodgkin, on the morbid anatomy of the mucous and serous membranes. It is well worthy the attentive perusal of all who are engaged in this particular branch of study. Mr. Swan continues his admirable delineations of the nervous system, and a second part of the illustrations of its comparative anatomy has appeared since our last meeting. The *Cyclopædia of Anatomy and Phy-*

siology, has reached its tenth part, and fully redeems the high promise guaranteed by the eminent list of its contributors. Upon the same plan, the first number of the *Cyclopædia of Practical Surgery*, edited by Mr. Costello, was published in the month of April, of the present year, and if its succeeding numbers correspond with the first in point of execution, it will constitute no unworthy associate of the *Cyclopædia of Practical Medicine*. The fourth part of the *Dictionary of Medicine*, by Dr. Copeland, after long anticipation, has been lately presented to the public, and, like the preceding portions of the same work, evinces the possession, on the part of its author, of extraordinary erudition, and talent for research, combined with scientific discrimination, and great soundness of professional judgment.

It will be almost universally allowed that medical science is, in many respects, greatly indebted, for the general diffusion of its improvements, to the circulation of well conducted periodical publications; and I have noticed, with much satisfaction, that two additions have been made to this class, within a recent period. One of these is under the editorship of Dr. Riofrey, and its professed object is to afford a conjoint and summary view of the actual state of both British and Continental medicine; the other is entitled the *British Annals of Medicine*, the first number of which was issued in January of the present year, and it seems to be conducted with considerable energy and ability.

Of all the collateral sciences, chemistry is, in its phenomena, one of the most varied and interesting;

and, in its application to medicine, it is highly important and extensive. It has not only given a systematic connection to isolated data, but has supplied a guiding rationale in the mutual action of medical ingredients. All the researches in physiology must be promoted, as well as most strikingly illustrated, by the light which chemistry has already afforded, and which it promises still further to afford. I lament that the multiplicity of topics, which I have been obliged to introduce into the present Address, renders it imperative that I should treat, very briefly, of recent chemical discoveries, and of the new laws which have of late been developed.

The recently detected acids are very numerous, the source of several of which is tartaric acid, acted upon by various agents. Of this *family* of acids, if I may so call them, may be mentioned the *racemic*, first obtained by the Germans from the grape, and differing from the tartaric in its containing two atoms of water. When this acid is subjected to an operation similar to that employed in the formation of pyro-tartaric acid, the *pyro-racemic acid* is obtained. An acid resulting from the mutual action of arsenic and alcohol has been discovered, and has been designated *arseno-vinic acid*. Several other acids, which it might be tedious to particularize, have also been for the first time detected. It is not improbable that, as in former instances in the history of chemistry, some of them will ultimately be found to be modifications of one another. That valuable order of chemical substances, the alkaloids, has received some additions. *Berberin* has been extracted from the *Berberis vulgaris*, or common

barberry; and *Oxyacanthin* has also been obtained from the same source. The common cowslip, or *Primula veris,* has yielded, under chemical manipulation, an alkaloid principle, to which the term *Primulin* has been applied. The neutral compounds are not remarkable, either for their number or importance. *Suberine* is the residue, after cork has been subjected to the successive action of water, alcohol, and ether. *Camphogene,* or *Dadyle,* is the product of the distillation of artificial camphor, mixed with hydrate of lime. *Hydro-benzamide* and *Baregin* also belong to the same class. From the nature of the ethers, and the mode by which they are generated, we might have expected a considerable variety, and such anticipation has been realized; thus, the *mucic,* the *napthalic,* the *suberic,* and the *hydro-sulphuric* ethers rank amongst recently discovered products. A new compound of iodine has been detected, by M. Aimé, which holds the same relation to this element, that chloral does to chlorine, and has hence been denominated *iodal.** An application of optics to chemistry has lately been made by the sagacious and indefatigable Biot. It depends upon the deviation of the polarized ray of light in various fluid media. As this phenomenon may hereafter be rendered subservient to purposes of practical utility, it is worthy of further investigation.†

The extraordinary results obtained by Mr. Crosse,

* *Comptes rendus hebdomadaires des séances de l' Academie des Sciences. Janvier,* 1837.

† The materials for the preceding brief sketch of the progress of chemical science have been freely appropriated, in as far as was thought proper, from the interesting annual of Dr. Robert Thomson.

in his electro-magnetic researches, have not yet been confirmed sufficiently to render it necessary for me to enter into any details on the subject. If his present expectations be realized, even to a very limited extent, they will certainly throw much light upon many points of natural science which yet remain in considerable obscurity.

Though I have been enabled to trace but briefly, and, I fear, but very imperfectly, the recent progress of chemistry, I must pause for a moment whilst I refer to the severe loss which this branch of science has sustained, in the decease of Dr. Henry, and Dr. Turner, two of its most zealous and distinguished cultivators. Dr. Henry was a native of Manchester, born on the 12th of December, 1774. His early predilection for scientific research was excited and fostered by his father, Mr. Thos. Henry, who had been long and successfully engaged in chemical investigations; and thus, at the earliest dawn of his powers of thought, he imbibed that philosophical spirit which, in after life, so eminently distinguished him. Upon the completion of his literary education, he became an inmate in the house of the late Dr. Percival, and, after a five years' residence with that accomplished scholar and physician, devoted chiefly to the general culture of his mind, and to the preliminary studies of his profession, he first engaged in the practical observation of disease in the Manchester Infirmary, where, in addition to the guidance of his more immediate preceptor, he also enjoyed the advantages derivable from the instructions of another eminent physician, the late Dr. Ferriar, and of one now present, our

late respected president, Dr. Holme. In the year 1795, Dr. Henry repaired to the University of Edinburgh, which then ranked amongst its teachers the celebrated Black, Gregory, Playfair, and Stewart; and, amongst its pupils, many of those eminent individuals who have since conferred such important advantages upon science, and thus reflected honour upon the genius and literature of their country. On leaving the University, Dr. Henry encountered, during five years, the fatigues and anxieties of general practice; but, owing to the delicate state of his health, he was compelled to relinquish this harrassing department of the profession, and returned to Edinburgh, receiving, in 1807, the diploma of "Doctor in Medicine." Whilst engaged, however, as a general practitioner, he contributed to the *Transactions of the Royal Society* several highly valuable papers, containing the results of his experimental researches in pneumatic chemistry, a division of science which always occupied a large share of his attention.

Dr. Henry, moreover, was not indifferent to the advancement of the profession to which he belonged, as is shewn by several interesting communications, on practical subjects, published in the medical journals of the day; by his important investigations, connected with the pathology of the urinary system; and by his more recent experiments relative to the disinfecting influence of high degrees of temperature on the matter of contagion. The general attainments of Dr Henry were also of a very high order, and though known to the world chiefly as a chemical philosopher, still it would be an injustice to his high

character, were he to be regarded only in that capacity. I would willingly dwell longer on the merits of Dr. Henry, for whose memory as a friend, I entertain sentiments of respect and esteem, and as a fellow-townsman a just pride and admiration, had not a memoir of his life and character been published by his son, in which are united the sacred feelings of filial piety, with scientific discrimination and refined taste.

Dr. Turner, Professor of Chemistry in the University College, London, died in the fortieth year of his age, on Sunday, the 12th of February of the present year. His scientific career, though terminated in early life, was eminently distinguished. His treatise on Chemistry is one of the most profound and valuable works which have been written on the subject, and it attained, very soon and deservedly, a degree of popularity which, for a publication of the kind, has been perhaps unprecedented. In successive editions, it is dedicated, in terms the most respectful and affectionate, to his revered and illustrious preceptor, Stromeyer of Gottingen, who was alike remarkable for his skill in analytical chemistry, and his power of imparting taste and precision to others. Owing, probably, to this circumstance, Dr. Turner ever manifested a decided predilection for this part of the science; and his papers on gaseous mixtures, and his elaborate researches on the compounds of manganese remain, with others, to shew his proficiency and success as an analyst. It may be mentioned as a melancholy coincidence, that the German Professor and his principal friend and rival in England, expired within a few months of each

other. Dr. Turner commenced, as a lecturer, by the delivery of private courses in Edinburgh, and he acquired so much celebrity, that, when the London University was established, he had no difficulty in obtaining the appointment to the chair of chemistry. His manner was characterized by clearness and simplicity. He had not only a perfect, but ready acquaintance with his subject; and, if he never dazzled by flights of imagination, he always allured by the stimulating interest which he took in promoting the progress of his pupils. In private intercourse, Dr. Turner was mild, affable, and courteous. His conversation was highly instructive, without the least pretension or display. He never attempted to raise himself by the depreciation of others; and thus, whilst he excited admiration by his intellectual worth, he inspired esteem by his personal qualities.

Amongst the distinguished physicians, and medical writers, who have been removed, by death, from the scene of their earthly labours, within the last twelve months, Hufeland of Berlin must not be passed over without my rendering a tribute to his memory upon the present occasion. Christophe Wilhelm Hufeland was born at Langensalza, in Thuringia, Upper Saxony, on the 12th of August, 1762. He was educated partly at the University of Jena, and partly at Leipsic, and took his degree of Doctor in Medicine and Surgery, at Gottingen, in the year 1783. He soon afterwards commenced practice at Weimar; and, early in his career, began to contribute to the leading medical periodicals of the day. An essay which he published about this time upon

the uncertainty of the signs of death, and upon the prevention of the distressing evils of premature interment, attracted much attention. It contained, moreover, a proposal to establish, at Weimar, a dead-house, for retaining the bodies of persons overtaken by violent or sudden death, until unequivocal symptoms of decomposition had ensued. This proposal was eventually carried into effect, not only in Weimar, but in many of the towns of Germany. In the year 1793, Hufeland removed to Jena, having received the appointment of Professor of Medicine in that University; and, two years afterwards, he commenced the publication of that celebrated Journal which has rendered his name so well known in almost every part of the civilized world. In 1801, he repaired to Berlin, having been chosen Physician to the King of Prussia, with the rank and title of Privy Councillor. He was afterwards elected Professor of Therapeutics and Clinical Medicine in the University of that city, and continued both to teach and to practise his profession, with the highest reputation and success, for upwards of thirty years. The last illness of Hufeland consisted in a return of an attack of retention of urine, under which he had suffered at a former period; and although the bladder was punctured above the pubis, still a fatal termination took place, on the 15th of August, 1836, from the occurrence of gangrene.

In addition to the great celebrity of Hufeland as a teacher, and as a journalist, his fame has been much enhanced by his writings, on various professional subjects; among which, may be especially mentioned, an excellent treatise on Nervous Fever

and its complications, as it appeared at Jena, in 1796, 97, and 98, also a work on Scrofula, and another on the Diseases of Children. His very excellent publication on the Art of prolonging Life, is very generally known, from its having received the honour of translation into several European languages.

In continuing the painful notice of the last year's obituary, the decease of one of the Vice-Presidents of this Association, Dr. John Johnstone, of Birmingham, claims our next attention, which melancholy event took place on the 28th of December, 1836. Dr. Johnstone was born at Kidderminster, in the year 1768, and after receiving the rudiments of a classical education at the Free Grammar School of that town, he entered Merton College, Oxford, where, in 1793, he took his degree of Bachelor of Medicine, having previously been engaged in the prosecution of his medical studies, also in London and in Edinburgh. He first commenced practice at Worcester, but in a short time removed to Birmingham ; and having, in the preceding year, taken his degree of Doctor of Medicine, he was, in 1801, elected Physician to the General Hospital of that town,—a field of usefulness, in which he indefatigably laboured for more than thirty years.

Dr. Johnstone was distinguished as an author, both in the medical and in the literary world. So early as the year 1795, he published an essay on Mineral Poisons, in which, as it was written forty year ago, we cannot expect to find the results of modern chemisty ; but though wanting in this respect, the accuracy with which the symptoms are

described, in this work, has never been surpassed in any later publication on toxicology. This essay, together with a most excellent one on Insanity which appeared in 1800, were originally intended to form part of a treatise on Medical Jurisprudence, which, however, was never completed. In 1803, Dr. Johnstone became a Fellow of the Royal College of Physicians, and, in 1813, was made a Fellow of the Royal Society. In 1819, he delivered the Harveian Oration at the College of Physicians, which is written in elegant Latin, and is alike creditable to the scholar and to the physician. Classical literature, indeed, was his favourite pursuit; and, hence, he was induced to undertake the Life of the celebrated Dr. Parr, which was published in 1828. In 1834, he had the honour of presiding at the Meeting of this Association, which was held at Birmingham, and the speech with which he opened the proceedings, together with the other occurrences of that day, would claim more than a passing notice; but, it is not necessary here to refer to circumstances which are commemorated in our *Transactions*, and which are doubtless fixed in the memory of all who were present on that interesting occasion. It was with deep concern that we remarked the indisposition under which he appeared to labour, at our meeting last year, in Manchester, from which time, I am informed, his health gradually declined, up to the period of his death. Dr. Johnstone was universally esteemed for the benevolence of his disposition, and for the uprightness of his character, as well as for the acuteness and vigour of his intellect; and this Association must deeply deplore the severe loss

which it has sustained by the decease of one, whose whole life presented an example of all that is amiable in the man, and accomplished and honourable in the physician.

It is with heartfelt regret that I now advert to the death of another of our associates, the late Mr. Ransome, of Manchester, who, it will be remembered, took an active part in the proceedings at our Anniversary Meeting of last year. Mr. Ransome died at the age of 58, having, in capacity of Surgeon to the Manchester Royal Infirmary, during the long period of thirty-one years, afforded the amplest evidence of his talents as a skilful and enlightened surgeon, and of his amiable qualities in the mild and humane treatment of his patients. He was one of the earliest teachers of anatomy and surgery in Manchester, and had been the Lecturer in the latter department of the profession, in the Pine Street Royal School of Medicine and Surgery, for nearly twelve years preceding his decease. It would far exceed the limits proper to be observed in this reference to the mortality of the last year, were I to offer a full tribute to the departed worth of one, with whom, as an hospital colleague, as a fellow teacher, and as a personal friend, I was, for many years, most intimately associated. In private life, Mr. Ransome's habits were eminently calculated to inspire confidence and esteem; and the affability of his manners, and the kindness of his disposition, procured for him the affectionate esteem of all who had the happiness of his acquaintance.

The parliamentary inquiry regarding medical education, recently instituted, forcibly suggests the

propriety of offering some observations, on that important, though difficult and complicated subject. Although, as yet, no formal Report has been made by the Committee appointed for this purpose, still as the public are nevertheless in possession of much instructive evidence, furnished by many able and experienced witnesses, we are now better qualified to form a correct opinion, as to the present state of medical education, and as to the best means by which it may be improved, and be made to keep pace with the general progress of science, and the advancement and wants of society. Without involving this Association in the minute consideration of this varied and extensive subject, I must, however, direct its attention to some of the more interesting and important points connected with the investigation. All are agreed that a comprehensive education, literary, scientific, and professional, is essential to the physician. Many of the best and most experienced authorities, also, are satisfied that though the physician should confine himself, in practice, to the treatment of internal diseases, it is yet of the greatest consequence that he should be acquainted with the nature, origin, and tendency of the local affections, which come properly under the management of the surgeon. The boundaries between general and local diseases are often so imperfectly defined, and the influence of constitutional conditions upon the origin of local diseases is so obvious, that it is scarcely possible for the physician to be always a judicious or successful adviser, without the possession of this auxiliary knowledge. I am aware that the time has been when physicians

considered the acquisition of such knowledge to be, if not degrading, at least unnecessary; but we have now, I rejoice to say, abundant proof of the progress of a more enlightened and rational spirit. It is remarkable, that though the same principle must recommend to the surgeon the attentive study of the theory and practice of medicine, yet this is not so specifically required by the great surgical incorporation of this kingdom as its high importance would seem to demand, The great revolution which has occurred in the study and actual condition of surgery, within the last half century, is mainly to be attributed to the energies of one individual,—to the genius of the immortal Hunter. And what was the distinguishing feature and characteristic of the principles which that great man propounded? Why, that physiology and general pathology were the only sure foundations on which a rational surgery could rest. Since the days of Hunter the rectification and simplification of surgical practice has been continued and advanced by Abernethy, Cooper, Lawrence, Bell, Brodie, and others; and if we consider, attentively, the circumstances by which this improvement has been brought about, we find that it consists, almost entirely, in the application of the general principles of medicine to the theory and practice of surgery. Although the College of Surgeons have enlarged and improved their *curriculum* of education, by the addition of lectures on the practice of physic, and on materia medica, yet it would appear desirable that it should embrace, moreover, a separate course on physiology. To form a just idea of the importance of teaching phy-

siology, in a course distinct from that of anatomy, we may refer to the example of several of the most celebrated foreign medical schools, and also to that of Edinburgh, in which the institutions of medicine, embracing physiology and pathology, have, for many years, constituted the subject of a separate chair. Physiology may be regarded as the basis not only of the philosophy of medicine, but also of that of surgery. With mere anatomy, or an acquaintance with structure, medicine and surgery can never be successfully studied, for this only teaches the constitution of the organs of the human body, as so much dead matter, whilst physiology reveals their functions, and this latter knowledge can only be obtained by an observation of living phenomena; and hence it is obvious that, although the study of anatomy must precede that of physiology, this latter constitutes, essentially, a separate branch of inquiry. I appeal, with considerable satisfaction, to the example afforded by the London University College, in which Institution provision is made for the delivery of a complete course of lectures on physiology of six months' duration.

I have already adverted to the necessity of the surgeon's possessing an adequate acquaintance with the principles and practice of physic. As it is admitted, in the evidence given before the Parliamentary Committee, by some leading members of the College, that *medical* practice constitutes by far the largest proportion of the actual duties of all surgeons, even of those in London, it is most certainly a grievous defect, that whilst twelve months' attendance upon the surgical practice of a

recognized hospital is required, no provision is made for attendance upon the medical practice. There is also another department of study, unnoticed in the *curriculum* of the College, with which the well-informed surgeon is expected to be specially acquainted. I allude to the subject of medical jurisprudence; for he is often called upon to determine the comparative danger of various wounds, contusions, and similar injuries; and also to decide as to the question, whether in any given case of severe accident followed by a fatal result, that result has been the effect of violence, or has ensued from the existence of previous disease in one or more important organs It is not enough to argue that a mere knowlege of anatomy, and the general principles of surgery, will enable him to perform this duty satisfactorily, for instances are almost of daily occurrence in which medical witnesses offer the most vague and inconclusive evidence, for want of that information which a previous systematic study of medical jurisprudence would be calculated to impart.

The education of the general practitioner, also, has recently been the subject of much discussion. It would be unjust to deny that the Society of Apothecaries have contributed, in no slight degree, to the improvement of the scientific character of this department of the profession. The regulations which they have issued, from time to time, have gradually advanced the medical education of those who would either have enjoyed no education at all, or have been satisfied with the smallest portion of information, requisite for the *practise* of the profession. The Society of Apothecaries are also entitled

to praise for exacting, from their candidates, certificates of attendance on courses of six months' duration upon anatomy, physiology, chemistry, and several of the other branches of science; and also for including, in their *curriculum*, lectures on forensic medicine. Inasmuch, however, as they do not require a separate course of lectures on physiology, their regulations are liable, in this respect, to the same objections as those of the College of Surgeons.

Before leaving the discussion of this question, I venture to offer a few suggestions, relative to the modes of education, best adapted for the three departments of the profession.

It is desirable, then, that every one destined to practise the medical profession, in any of its branches, should possess a liberal preliminary education, by which I mean a solid instruction in the history and literature of his own country, some knowledge of the mathematics, and an acquaintance with the French and Latin languages. To all, however, who are anxious to attain an eminent position in the profession, it is of some importance that the preliminary education should be more extended, and should embrace a knowledge of the German and Italian languages, in addition to the French, and an acquaintance with the Greek as well as with the Latin language. General information in some of the more prominent departments of natural history, and upon the elementary principles of physics, is also important to the aspirant for distinction in medicine.

Having thus noticed what, according to my own opinion, constitute the preliminary requisites of a

medical education, I now proceed to state, briefly, the views which occur to myself, regarding the course of study more strictly professional. I see no good reason why any very marked distinction should be made, during the first three or four years, in the education of the physician and the surgeon. An intimate acquaintance with general and descriptive anatomy, and physiology, with materia medica, chemistry, and pharmacy, is alike requisite to both, and may be acquired, for the most part, within the two first seasons. During the two succeeding years, the studies of each may be pursued by an attendance upon lectures on the principles and practice of medicine, and also of surgery, by lectures on midwifery and the diseases of women and children, and on medical jurisprudence, including medical police and hygiène. Within this period, it may be proper for the student to attend the lectures on physiology, separate from those on anatomy, an arrangement of some importance, upon which I have previously dwelt. At this time, also, instruction in general pathology, in clinical medicine and surgery, with an attendance upon the practice of a well-regulated hospital, is indispensable. Upon completion of the above course of study, it will become desirable to modify the subsequent education, in some degree, according to the destination of the individual to medicine or surgery. The physician should now direct his attention more exclusively to clinical medicine, and to the pathology of the internal organs; whilst the surgeon should, at the same time, devote himself chiefly to the study of surgical anatomy and surgical pathology, and to the acquire-

ment of skill and dexterity in the performance of operations, by repeated practice upon the dead body. Students, in general, derive but little immediate advantage from their earlier clinical attendance, and it is only after they have been for some time habituated to the pursuit, that they begin to understand its real importance, and to exercise that independence of thought, in personal investigation, which tends so materially to sharpen the observation, and to strengthen the judgment. To the physician, a competent knowledge of the nature, causes, and treatment of the various forms of insanity, is eminently requisite; and it is to be regretted, that the means of studying this branch of medical science, in our own country, are so limited, owing to the difficulty of procuring access to establishments for the treatment of this class of disorders. To the surgeon, the diseases of the eye, and of the ear, should form also an especial object of study.

It is highly desirable, in completing the physiological education of members of either division of the profession, that some attention should be bestowed upon comparative anatomy; and lectures seem to be the most ready mode of communicating, in a short time, general views upon this subject. As an accomplishment to both physician and surgeon, an acquaintance with the literary history of medical science is also indispensable. Courses of lectures upon this branch of information are regularly delivered in several of the Continental Universities; and some attention to this subject, by enlarging the sphere of thought, would lead the practitioner to form a more just estimate of the value of various

and conflicting doctrines, and methods of treatment.

And last of all, though not of the least importance, I am brought to speak of the professional education of that extensive and most useful body, the general practitioners. It is almost universally agreed, that the period of five years, for apprenticeship, as at present required by Act of Parliament, is too extended, and might certainly be reduced to the term of three years, with decided advantage both to the pupil and to the profession at large. For it must be allowed, that every beneficial result that can be expected to ensue from an apprenticeship at all, may be obtained within the last-mentioned period. After the termination of the apprenticeship, the student should commence his attendance upon lectures and hospital practice. Then, it would be well that he should bestow his principal attention upon anatomy, chemistry, materia medica, and botany, by a diligent attendance upon lectures on these branches, during the first year; and, during the second year, he might occupy himself with dissections, and begin to attend lectures upon the theory and practice of medicine, and of surgery, midwifery and the diseases of women and children, and medical jurisprudence. After being specially engaged for a period of two years in acquiring a competent knowledge of these various branches of medical science, the student should, during a third year, apply himself, with a somewhat exclusive assiduity, to the general practice of the hospital, and avail himself of the opportunities for clinical instruction which the Institution might afford. Though he should not allow himself to lose sight of any of

the information derived from his previous attendance upon lectures, he might yet relax, in some degree, in this mode of application, as an uninterrupted attention to the details of any of the collateral sciences might abstract his mind too much from what should then have become its principal object;—its adaptation to pursuits of a more practical character. During this third year, which might constitute the last of the *exacted* term, separate lectures on physiology and general pathology would be attended with the highest degree of advantage.

Before finishing these observations, it may be proper to offer just one remark regarding the duration of the courses of instruction, and the number of lectures delivered within a given time. According to my own view of the matter, three months form, in general, a period too limited for communicating full and satisfactory information upon the several branches of science of which practical medicine consists, and I anticipate that, under an improved system of education, due regard will be given to this subject.

As bearing, in many respects, upon this important topic of medical education, I am led to the consideration of the formation and consequences of the new Metropolitan University. No difference of opinion can exist as to the propriety of the capital of these kingdoms being the seat of an University, with power to grant degrees. The charter which establishes this University, conveys to the Chancellor, Vice-Chancellor, and other officers, the privilege of holding annual meetings for the purpose of examining candidates, and conferring on them various de-

grees, indicative of their literary, scientific, and professional attainments. It exacts that they admit to examination all persons possessed of the proper certificates from the London University College, from King's College, and from such other bodies, corporate or otherwise, as may hereafter, upon due consideration, be authorized to grant them; and, with a view to the accomplishment of this object, it requires the governing body to report, from time to time, to the Secretary of State for the Home Department, the names of such other institutions, for medical education, as it may be deemed right to include in the list of those from which candidates may be admitted to examination. In the execution of their functions, the Board, we have reason to conclude, will take cognizance only of uniformity in the course of education, and of adequacy in the attainments and qualifications of the candidate, without reference to the religious or political party to which he may happen to belong. This is a great and encouraging advance in the progress of a liberal and enlightened policy, with regard to the interests of our profession. It is to be hoped that the *curriculum* of the Metropolitan University, when issued, will not require a less amount of qualification than is demanded by that of the University of Edinburgh; and, under all circumstances, we may, I think, expect great good to result, both to the scientific character, and to the respectability of our profession, from the operation of this new establishment.

The continued prevalence of licentious empiricism presents a lamentable anomaly in the annals of civilization, and is strangely at variance with the

vaunted intelligence of the nineteenth century. Quackery has hitherto enjoyed almost undisturbed possession of the public mind, in some measure owing to an undue apprehension, on the part of medical men, of being suspected of interested motives in any attempt to unmask its evils, or to expose its baleful influence upon the well-being of the community. Among the most fertile causes of the success of this system of tampering with the lives and the health of its miserable dupes, may chiefly be included the deplorable ignorance, even of persons of education, with respect to the structure and functions of the human body, and all that relates to health and disease; for, in the language of the *Foreign Quarterly Review*, the popular idea of medicine would appear to be "that it is an art, a craft, a kind of *knack*, which some people are born with, or attain without study, and by the mere felicity of nature." And, assuredly, if we may judge from daily experience, charlatanism would seem to receive an amount of public patronage in proportion to the boldness and impudence with which it is associated. Perhaps it may not be difficult to account for the encouragement which it receives from the rich and luxurious. In proportion as they enjoy, and frequently abuse, to the detriment of their health and comfort, the good things of this life, they feel unwilling to part from them; and, thus, readily yield to the pretensions and effrontery of some plausible and interested quack. They willingly join in offering incense on the altar of that idol which they wish to regard as endowed with powers of healing superior to those of the well edu-

cated members of the profession. In short, they deceive themselves, and *are willing* to be deceived. It is a most humiliating circumstance, that, in this enlightened country, quackery is openly protected by the Government, whilst in almost all the other states in Europe, it is prohibited, under severe penalties; for, as is stated by the able author of a recent pamphlet, "On the danger, irrationality, and injustice of Quackery," more than a hundred thousand pounds is annually paid to the revenue of the country, for circulating the deadly nostrums of the empiric, under the sanction of a Government stamp; besides a large amount, received for the duty on advertisements.

It would appear as though there were different grades in the ranks of quackery, varying from the rude and vulgar empiric to the crafty and subtle pretender, who, wearing the outward badge of an honourable profession, has a soul so base as to sacrifice its most sacred interests at the shrine of his low-minded cupidity. Unfortunately, too, the names of some of the leading members of our profession have been circulated, in almost every newspaper in the United Kingdom, in testimony of the superior efficacy of certain remedies, professedly secret, and, therefore, undeserving of honourable sanction. I am more especially induced to allude to the subject, on this occasion, because I think it important that an Association, like the present, should affix its seal of reprobation, not only upon the direct encouragement of empiricism itself, but also upon every countenance bestowed upon it, from whatever quarter it may proceed.

Notwithstanding the apprehension which I entertain of having already trespassed, too long, upon the time and attention of the present assemblage, yet I feel reluctant to close this Address, without an expression of my respect and admiration for the ardent zeal, unwearied industry, and conspicuous talent which have been displayed by so many of our professional brethren, in the cultivation and enlargement of almost every branch of the healing art. Ours is an eminently useful, noble, and (to borrow the sentiment of the great Roman orator and moralist) *a God-like* profession; are we not then bound, by every sense of duty and honour, individually and collectively, to employ our utmost efforts to extend its utility, and to secure its respectability? And, most assuredly, no means are better adapted for the promotion of these laudable purposes, than the association of the dispersed members, and different ranks of the profession, in one body like our own Institution. A spirit of honourable and generous rivalry is in this way excited, leading to exertions for the extension of practical information and scientific research. Personal interviews, whilst they favour mutual instruction, encourage, also, kindly and social feeling, and thus exercise a powerful influence in checking those animosities and unworthy jealousies, which, arising in too many instances from the clashing of interests, not only disturb the harmonious relations of the profession, but injure its character in the public estimation.

It is, indeed, true, that some able, modest, and meritorious practitioners may naturally feel indig-

nant, if not envious, in witnessing the comparatively greater success of their less qualified, and, in every sense, less worthy competitors; since we but too often observe, that servility of manner, and the confident assumption of superior skill triumph, for a time, over real and unassuming merit. But let not the former be discouraged, for time and perseverance, and, above all, the estimation and countenance of the talented and liberal members of the profession will be sure, eventually, to place them in their just rank, and secure to them a due degree of popular favour.

In conlusion, I beg most cordially to congratulate this Association, and more especially its enlightened, zealous, and distinguished founder, upon the success which continues to attend its various exertions, in promoting the advancement of professional science, and in contributing to the maintenance of high and honourable feeling amongst its numerous members. I am assured, that our present position is so satisfactory, that nothing is required to secure the permanence and to extend the utility of our Association, but a steady perseverance in the noble work in which we are all engaged.

> *" Hoc opus, hoc studium parvi properemus et ampli,*
> *Si patriæ volumus, si nobis vivere cari."*

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